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ABSTRACT

This report discusses the outcomes of a study that investigated whether a self-contained (SC) or pull-out (PO) intervention model was the most effective and most supportive of children's behavioral gains over the course of the entire 1996/1997 year. Data were collected by reviewing the clinical records of children (ages 6-14) who participated in one of central Mississippi's Comprehensive Mental Health Center School based day-treatment programs. An available sample of all the children who had been in either the PO (n=56) or SC (n=32) programs were included in the sample. An outpatient group (OP) of children (n=139) who attended regular education classes at school and received outpatient mental health was also included. Results indicated: (1) the significant differences between groups were not found between the SC and PO models, but between the SC and PO models and the OP groups; (2) the SC model was not significantly more effective than the PO model; (3) children in the SC group progressed behaviorally more than did the children in the PO or OP groups; and (4) children in the SC group had much longer lengths of stay in psychiatric inpatient settings of residential facilities than did the children in the PO or OP group. (CR)

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ED 445 467

A Mississippi School-Based Day Treatment Program Evaluation

Introduction

School-based day-treatment programs (SBDTP) are a significant part of the cadre of intervention programs designed to address the needs of school age children with emotional and behavioral problems. Despite their broad acceptance, SBDTPs have not been systematically evaluated in Mississippi. SBDTPs are usually structured after a self-contained (SC) or pull-out (PO) model. Children in the SC model spend the entire school day in the day treatment classroom. Children in the PO model are "pulled out" from their instructional class every day for a minimum of two hours and included in a day treatment class. An outpatient (OP) group was included in the design of the study as a comparison. The children in the OP group attended regular classes at school and received outpatient mental health counseling. The purpose of this study was to determine which intervention model (SC or PO) was the most effective and most supportive of children's behavioral gains over the course of the entire 1996/1997 academic year. We also were interested in which model had the fewest psychiatric hospitalizations and, if admitted, the shortest average length of stay.

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Methodology

Data were collected by reviewing the clinical records of 119 children who participated in one of central Mississippi's Comprehensive Mental Health Center SBDTPs. Data were collected at four points during the 1996-97 academic year (August, November, February, and May). An available sample of all the children that had been in either the pull-out (PO) or self-contained (SC) programs were included in the sample. The outpatient (OP) group was randomly selected from a sampling frame of registered clients within each of the four counties served by the mental health center. Selected cases had to have DSM-IV Axis I diagnoses that were comprised of disorders related to mood, impulse, defiance, or conduct and a Global Assessment of Functioning (GAF: American Psychiatric Association, 1994)) score not greater than 50 at admission. Furthermore, the children had to be between the ages of 6 and 14 years and have IQ scores greater than 69.

The majority (71%) of the children (N = 199) whose records were reviewed were African American and most were males (74%). The average age for participants was 10 (SD = 2.25; Range = 6-14). Most of the children (77%) were in grades one to five. Almost all the children (99%) lived with their parents. Over half of the children's parents (51%) earned wages through work while the remainder received AFDC, SSI or some "other" income. None of the children in the OP group (n = 139) were in special education classes yet they were mental health center outpatient clients. Children in the SC (n = 32) and PO (n = 56) groups were in special

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education, alternative education or Chapter 1 programs. The most frequently used primary diagnoses ascribed to children included in this study were Attention Deficit Hyperactivity Disorder (38%) and Oppositional Defiant Disorder (32%). Nineteen percent (19%) of the children in the OP group were diagnosed as Depression NOS. Within the SC group, 19% took medications that targeted behavioral/ mental health symptoms as compared to 9% within both the PO and OP groups. The severity of clinical symptoms was the only real difference between the SC and PO groups. The OP group differed most significantly from the SC and PO in that they were in regular classes and had fewer clinical symptoms.

The primary outcome variable used in this study was the Global Assessment of Functioning (GAF) scale. The GAF is the DSM-IV Axis V code that reflects behavioral functioning. GAF scores range from 0-100 with higher values representing more appropriate behavior and lower scores representing more inappropriate behavior. GAF scores were documented in each child's clinical record every 90 days by assigned mental health clinicians.

Results

The MANOVA confirmed that there was no interaction between the groups (intervention models) and time (observation 1, 2, 3, & 4). Consequently, each of the main effects were tested. The null hypothesis postulating no difference between the three groups was rejected ($F = 14.45$; $p < .0001$). The Tukey follow-up procedure was used to determine the pair wise differences. The means and standard deviations are included in Table 1. The significant differences between groups were not found between the SC and PO models. Instead, the significance was found between the SBDTPs (SC & PO) and the OP group. Our findings indicate that at no time was there a significant pair wise difference between the SC and PO models. In other words, the SC model was not significantly more effective than the PO model. The children in the PO group made as many gains as the children in the SC group in the sense that they all finished the academic year with nearly identical GAF scores.

It is clear, when comparing GAF scores from August to May, that children in all three groups made some gains during the entire school year. The main effect for time ($T1$ = Aug, $T2$ = Nov, $T3$ = Feb, $T4$ = May) using the GAF scores was significant ($F = 8.02$; $p < .0001$). The results of the Tukey follow-up procedures to determine significant pair wise differences across time periods are listed above in Table 1. First, our data indicated that the middle of the year represented a significant break in progress or momentum for all the intervention models. We also found that the children in the SC group progressed behaviorally more than did the children in the PO or OP groups. Obviously, the children in the SC group started with lower GAF scores, an indication of more serious behavioral problems, yet they finished the year at the same point as the children that were in the PO group. The SC group's behavioral gains did level-out at mid-year, but in the last quarter (February to May) increased significantly again. In other words, they finished the academic year strongly by making behavioral gains through May. The PO group started the year with a significant behavioral improvement in the first quarter. But their gains were not sustained beyond November. The children in the PO group spent about half the academic year without any notable behavioral change. The OP group made behavioral improvements through February. After February, however, these children made no significant behavioral gains.

The children in the SC group had much longer lengths of stay ($M = 74$ days) in psychiatric inpatient settings of residential facilities than did the children

Table 1: GAF Scores for Groups by Time

	Aug 1996	Nov 1996	Feb 1997	May 1997
Group 1 (SC)	42.28	43.36	43.6	46.2
	[4.46]	[5.37]	[3.38]	[6.26]
Group 2 (PO)	44.54	45.36	45.93,b	46.5
	[4.38]	[4.67]	[4.23]	[4.86]
Group 3 (OP)	47.90	49.51	50.39	50.45
	[7.77]	[6.46]	[7.04]	[7.54]

*Standard Deviations are enclosed in [ ].
*Means in the same column with different superscripts are significant differences at
*Means in the same row with the same subscripts not have significant differences. All
other pairs are .05.

in the PO (M = 17.5 days) or OP group (M = 6.4 days). The highest percentage of hospitalizations was among the OP group which reached 20%. The OP group had a greater percentage of children that were hospitalized, although their average length of stay was the shortest (see Table 2). The large percentage of children that were hospitalized from the OP group (20%) was unexpected. This suggests, although many were higher functioning than the SC or PO groups, that the children in the OP group still needed more ongoing structure and support than what they were getting. Their short length of stay once they got to the psychiatric hospital further supports this notion that these children need additional support in that they benefited from short, focused interventions.

Conclusions

Our study was not able to confirm that the SC model was appreciably better than the PO model. Children participating in both groups finished the school year at about the same level of behavioral functioning. Probably our greatest concern was related to the failure of all three groups to support and encourage behavioral gains between November and May, with the exception of the SC group. These SBDTPs were designed to "catch" children up socially and academically. Clearly, if these int. rventions were unable to support behavioral gains throughout the entire school year, then there is a problem with the model. A therapeutic model designed to last for nine months should not lose its measurable effectiveness after only four month. These intervention models should be redesigned to address this problem so children will not fall further behind socially and academically.

Table 2
Hospital Admissions & Length of Stay

	N	% Hospital Admissions	ALOS
Group 1 (SC)*	32	6 %	M = 74
Group 2 (PO)	55	4 %	M = 17.5
Group 3 (OP)	112	20 %	M = 6.4

* The Self-Contained group had hospital admission to Psychiatric Residential Treatment (Average LOS = 180)

References

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders.* (4th rev. ed.). Washington, D.C.: American Psychiatric Association.

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